UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/856,515	06/15/2001	Hwee Hwa Pang	P21103	5642

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EXAMINER
LIN, KENNY S

ART UNIT	PAPER NUMBER
2154	

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>06 June 2005</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-32</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-32</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

    1.☒ Certified copies of the priority documents have been received.

    2.☐ Certified copies of the priority documents have been received in Application No. _____.

    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-32 are presented for examination.

Information Disclosure Statement

2.   Applicant is reminded again that:

The IDS submitted on October 9, 2001, April 12, 2002 and March 25, 2002 have been

considered. However, certain documents are missing.

The information disclosure statement filed October 9, 2001 fails to comply with 37 CFR

1.98(a)(2), which requires a legible copy of foreign patent; each publication or that portion which

caused it to be listed; and all other information or that portion which caused it to be listed. A

copy of document "PKZIP (R) FAST! Create/Update Utility Version 2.04g, 1993-01-02" is

needed in order for the information to be considered by the examiner.

The information disclosure statement filed April 12, 2002 fails to comply with 37 CFR

1.98(a)(2), which requires a legible copy of foreign patent; each publication or that portion which

caused it to be listed; and all other information or that portion which caused it to be listed. A

copy of document "Microsoft Office 97, 1997; Power Point 97, Pack&Go, Save as HTML;

Outlook 97; Scheduler" is needed in order for the information to be considered by the examiner.

Both information disclosure statements have been placed in the application file, but the

information referred to therein has not been considered.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999

(AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002

do not apply when the reference is a U.S. patent resulting directly or indirectly from an

international application filed before November 29, 2000. Therefore, the prior art date of the

reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA

35 U.S.C. 102(e)).

4.   Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Tahara et al (Tahara),

US 6,134,580.

5.   Tahara was cited in the previous office action.

6.   As per claim 1, Tahara taught the invention as claimed including a method for migrating

a computing process from a first host to a second host (col.14, lines 34-61), wherein said process

discards data, and/or program code and execution states specific to the first host (col.8, lines 41-

67, col.9, lines 1-9, col.14, lines 58-61), and wherein said process receives data (col.10, lines 10-

14), and/or program code (col.10, lines 53-60) and execution states (col.9, lines 12-25) specific

to said second host (col.8, lines 41-67, col.9, lines 1-9, col.14, lines 34-61).

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

8.   Claims 2, 11 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Tahara et al (Tahara), US 6,134,580, in view of "Official Notice".

9.   As per claims 2, 11 and 21, Tahara taught the invention substantially as claimed in claim

1. Tahara further taught said process discards data, and/or program code and/or execution states

specific to said first host after migration to said second host (col.8, lines 41-67, col.9, lines 1-9,

col.14, lines 58-61). Tahara did not specifically teach said process discards data, and/or program

code and/or execution states specific to said first host prior to migration to said second host; or

before or after receiving data, and/or program code and/or execution states specific to said

second data after the migration. However, Tahara taught that the data, program code and

execution states are used to generate plan for the migration (col.11, lines 48-67, col.12, lines 1-

47, col.14, lines 29-61) and that the data, program code and execution states of the first host are

not needed in the migration since the migration only involves the generated plan (col.14, lines

29-61). Hence, it is obvious to discard data, program code and executions states specific to the

first host at any desire point only the plan is generated. Official Notice is taken that the

limitations narrowed by these claims are consider obvious and furthermore a matter of design

choice. It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Tahara and "Official Notice" and discard the information

stored in the first host at any user desire period of time prior or after the migration of the process.

10.   Claims 3-4, 6-10, 12-17, 22-28 and 31-32 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Tahara and Official Notice as applied to claims 2, 11 and 21 above, and

further in view of Jagannathan et al (Jagannathan), US 6,496,871.

11.   Jagannathan was cited in the previous office action.

12.   As per claims 3 and 12 and 22, Tahara taught the invention substantially as claimed in

claims 2, 11 and 21. Tahara further taught to form plans for migration (col.8, lines 58-67, col.11,

lines 48-67, col.12, lines 1-47, col.13, lines 48-67, col.14, lines 1-4). Tahara did not specifically

teach that prior to migration a construct is formed comprising application specific data, and/or

program code and/or execution states of said process. Jagannathan taught to form a construct

that comprises application specific data, and/or program code and/or execution states of said

process prior to the migration (col.13, lines 23-50). It would have been obvious to one of

ordinary skill in the art at the time the invention was made to combine the teachings of Tahara

and Jagannathan because Jagannathan's teaching of forming a construct for migration enables

Tahara's method to perform whole or partial migration of objects.

13.   As per claims 4, 13 and 23, Tahara and Jagannathan taught the invention substantially as

claimed in claims 3, 12 and 22. Jagannathan further taught that the construct is formed by a

construction operation and records application specific data, and/or program code and/or

execution states of the construct (col.6, lines 11-30, col.13, lines 20-50). Tahara and

Jagannathan did not specifically teach to suspend all active threads of said process. La Porta

taught to stop the processes in responding to migration request (col.9, lines 1-3, 35-37). It would

have been obvious to one of ordinary skill in the art at the time the invention was made to

combine the teachings of Tahara, Jagannathan and La Porta because La Porta's teaching of

stopping process at any time in response to a migration call enables Tahara and Jagannathan's

method to quickly respond to migration (see La Porta col.9, lines 1-3).

14.   As per claims 6, 14 and 24, Tahara and Jagannathan taught the invention substantially as

claimed in claims 3, 12 and 22. Tahara and Jagannathan did not specifically teach that said

construct is provided with an authorizing signature. However, it is obvious to provide

authorizing signature to ensure only the receiving host is able to access the construct. Official

Notice is taken that both the concept and advantage of using authorizing signature to ensure

authorized use of the information is well known and expected in the art. It would have been

obvious to one of ordinary kill in the art at the time the invention was made to combine the

teachings of Tahara and Jagannathan and further encrypt the construct with authorizing signature

to ensure only the receiving host of Tahara and Jagannathan's method is able to access the

construct and prevent unauthorized access.

15.   As per claims 7, 15 and 25, Tahara and Jagannathan taught the invention substantially as

claimed in claims 3, 12 and 22. Jagannathan further taught that said construct is sent directly to

said second host on a communication medium (col.17, lines 50-67, col.18, lines 1-23).

16.   As per claims 8, 16 and 26, Tahara and Jagannathan taught the invention substantially as

claimed in claims 3, 12 and 22. Jagannathan taught that certain objects can be sent to an

intermediary host and subsequently to the second host (col.11, lines 41-48). Tahara and

Jagannathan did not specifically teach said construct is sent to an intermediary memory storage

means, and subsequently to said second host. However, it would have been obvious to place the

construct in the temporary storage prior to the period of migration. Official Notice is taken that

both the concept and advantage of storing information in an intermediary memory storage as a

temporary storage is well known and expected in the art. It would have been obvious to one of

ordinary skill in the art at the time the invention was made to combine the teachings of Tahara,

Jagannathan and further enable the construct or other objects to be first stored in a temporary

storage during the process of migration in order to protect the objects from corruption in

migration.

17.   As per claims 9, 17 and 27, Tahara and Jagannathan taught the invention substantially as .

claimed in claims 7, 15 and 25. Jagannathan further taught that a second process is created/run

on said second host that comprises the data, program code and execution statues in said construct

(col.17, lines 50-67, col.18, lines 1-23, 39-51). It would have been obvious to one of ordinary

skill in the art at the time the invention was made to combine the teachings of Tahara and

Jagannathan because Jagannathan's teaching of whole migration enables Tahara's method to

move processes of different hosts to another host and perform further process at the another host.

18.   As per claims 10 and 28, Tahara and Jagannathan taught the invention substantially as

claimed in claims 9 and 27. Jagannathan further taught that in said second host a third process is

created containing system specific data, and/or program code and/or execution states relating to

said second host (col.9, lines 15-41) and wherein said second process assimilates said third

process (col.9, lines 15-41; simultaneously).

19.   As per claims 31, Tahara taught the invention substantially as claimed in claim 1. Tahara

did not specifically teach that the data, and/or program code and/or execution states discarded by

said process relates to library modules and/or input/output device drivers of said first host.

Jagannathan taught that data, and/or program code and/or execution states relates to library

modules and/or input/output device drivers of said first host are marked not to be migrated

(col.11, lines 34-41, e.g. discard). It would have been obvious to one of ordinary skill in the art

at the time the invention was made to combine the teachings of Tahara and Jagannathan because

Jagannathan's teaching of discarding the object in relate to device drivers of the host ensures that

important objects of certain hosts of Tahara's method are not migrated to the other host.

20.   As per claim 32, Tahara taught the invention substantially as claimed in claim 1. Tahara

further taught that the data, and/or program code and/or execution states received by said process

relates to input/output device drivers of said second host (col.8, lines 8-13, col.10, lines 55-58).

Tahara did not specifically teach that the data received by the process relates to library module of

the second host. However, it is obvious to provide information such as data, program code or

execution states from at library module such as information storage. Jagannathan taught that

data, and/or program code and/or execution states received may be provided from library

modules and/or input/output device drivers of said second host (col.11, lines 34-41). It would

have been obvious to one of ordinary skill in the art at the time the invention was made to

combine the teachings of Tahara and Jagannathan because Jagannathan's teaching of using

storage modules in providing information enables Tahara's method to perform process using

objects that are statically dependent to the host.

21.   Claims 5, 18-20 and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Tahara, Official Notice and Jagannathan as applied to claims 4, 17 and 28 above, and

further in view of La Porta et al (La Porta), US 6,085,086.

22.   La Porta was cited in the previous office action.

23.   As per claim 5, Tahara, Jagannathan and La Porta taught the invention substantially as

claimed in claim 4. Tahara taught the invention substantially as claimed in claim 4. Jagannathan

further taught said construct comprises only data, program code and execution states falling

within lists that are passed to said construct operation (col.11, lines 34-51). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Tahara, Jagannathan and La Porta because Jagannathan's teaching of migrating only the object that are listed as information that can be migrated enables Tahara, Jagannathan and La Porta's method to keep the objects that should not be moved.

24.   As per claims 18 and 29, Tahara and Jagannathan taught the invention substantially as claimed in claims 17 and 28. Jagannathan further taught said second process performs a mutate operation and discards system specific data and/or program code and/or execution states relating to said first host (col.6, lines 11-30, col.12, lines 6-11, col.13, lines 20-50). Tahara and Jagannathan did not specifically teach to suspends all active threads of said second process. La Porta taught to stop the processes in responding to migration request (col.9, lines 1-3, 35-37). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Tahara, Jagannathan and La Porta because La Porta's teaching of stopping process at any time in response to a migration call enables Tahara and Jagannathan's method to quickly respond to migration (see La Porta col.9, lines 1-3).

25.   As per claims 19 and 30, Tahara, Jagannathan and La Porta taught the invention substantially as claimed in claims 18 and 29. Jagannathan further taught said second process comprises only data, program code and execution states falling within lists that are passed to said mutate operation (col.11, lines 34-51). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Tahara and Jagannathan

because Jagannathan's teaching of migrating only the object that are listed as information that can be migrated enables Tahara and Jagannathan's method to keep the objects that should not be moved.

26.   As per claim 20, Tahara, Jagannathan and La Porta taught the invention substantially as claimed in claim 19. Jagannathan further taught that in said second host a third process is created containing system specific data, and/or program code and/or execution states relating to said second host (col.9, lines 15-41) and wherein said second process assimilates said third process (col.9, lines 15-41; simultaneously).

Response to Arguments

27.   Applicant's arguments filed 6/6/2005 have been fully considered but they are not persuasive.

28.   In the remark, applicant argued: (1) Tahara does not teach or suggest that the data and/or program code and execution states of the computing process specific to the fist host is discarded (see remark page 8, paragraph 3). (2) Tahara does not teach that the computing process discards data and/or program code and execution states specific to the first host since column 16, lines 23-27 shows that it is a node manager that is responsible for deleting an agent (see remark page 9, paragraph 3). (3) Tahara does not disclose that the request code contains data and/or program and execution states that is specific to the destination node (see remark page 10, paragraph 1). (4) Tahara is non-analogues art since Tahara is not concerned with solving migration difficulties

of a computing process due to hardware/configuration incompatibilities between sending and

receiving hosts (see remark page 10, paragraph 2).

29.   Examiner traverse the argument:

As to points (1) and (3), prior to the amendment, the claim language in claim 1 stated to

discard/receive any one of three elements: 1. data. 2. program code. or 3. execution states

specific to the first/second host. The amendment presented further results claim 1 to

discard/receive either one of the two elements where the first element being the data and the

second element being the combo of program code and execution states specific to the

first/second host. Since claim 1 expresses the **OR** condition, the reference needs to show only

one of either one of the limitations, in which Tahara taught a method for migrating a computing

process from a first host to a second host (col.14, lines 34-61), wherein said process discards at

least data (col.8, lines 41-67, col.9, lines 1-9, col.14, lines 58-61), and wherein said process

receives at least data (col.10, lines 10-14).

As to point (2), columns 16, lines 23-27, column 17, lines 51-54 and column 19, lines 1-6 cited

by the applicant to point out a node manager is used to the delete of agents is inappropriate since

the cited areas are teachings specific to the second embodiment of Tahara's reference. The two

embodiments each contain distinctions cannot and should not be mixed and relied upon in

presenting eligible arguments when the rejection is based on a particular embodiment of the

reference. The cited area in the above rejection in Tahara's reference are specific to the first

embodiment which Tahara taught to delete agent process when determine they are no longer

needed.

As per claim (4), in response to applicant's argument that Tahara is nonanalogous art, it has been

held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be

reasonably pertinent to the particular problem with which the applicant was concerned, in order

to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977

F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Tahara reference is in the field of

agent migration process, which is the applicant's endeavor.

In response to applicant's argument that the references fail to show certain features of

applicant's invention, it is noted that the features upon which applicant relies (i.e., solving

migration difficulties of a computing process due to hardware/configuration incompatibilities

between sending and receiving hosts) are not recited in the rejected claim(s). Although the

claims are interpreted in light of the specification, limitations from the specification are not read

into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's arguments, the recitation migrating a computing process has not

been given patentable weight because the recitation occurs in the preamble. A preamble is

generally not accorded any patentable weight where it merely recites the purpose of a process or

the intended use of a structure, and where the body of the claim does not depend on the preamble

for completeness but, instead, the process steps or structural limitations are able to stand alone.

See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150,

152, 88 USPQ 478, 481 (CCPA 1951).

Because Applicants have failed to challenge any of the Examiner's "Official Notices"

stated in the previous office action in a proper and reasonably manner, they are now considered

as admitted prior art. See MPEP 2144.03

Conclusion

30.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

31.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Kenny Lin whose telephone number is (571) 272-3968. The

examiner can normally be reached on 8 AM to 5 PM Tue.-Fri. and every other Monday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the

organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ksl
July 22, 2005

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